

**AGRICULTURAL RESOURCES**  
**LOCAL AGRICULTURAL RESOURCES ASSESSMENT**  
**(LARA) MODEL RESULTS**  
**for**  
**EMERALD HILL TPM 4 LOT & REM SUBDIVISION**  
**SAN DIEGO COUNTY, CALIFORNIA**  
**TPM 21057**

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## **1.0 EXECUTIVE SUMMARY**

The project proposes a 4 lot/remainder parcel subdivision on 19.91 acres of land located adjacent to Mission Road in the Fallbrook Community Plan area. Access is proposed from Emerald Hill Drive on the south side of the project. The project would be served by onsite septic systems. Proposed parcel sizes range from 2.47 acres to 8.13 acres. The site currently supports avocados.

Based on the results of the Local Agricultural Resources Assessment (LARA) Model, the site is not considered an important agricultural resource. The site received a low rating for soil quality, land use consistency, and slope. The site received a high rating for climate, water and surrounding land use. To be considered an important agricultural resource under the LARA model, a soil rating of either high or moderate must be present. Therefore, the site's low soil quality rating means that the site is not an important agricultural resource. The results of each LARA model factor rating that contribute to this determination are detailed below.

## **2.0 LOCAL AGRICULTURAL RESOURCE ASSESSMENT (LARA) MODEL**

In determining whether impacts to agricultural resources are significant environmental effects, the CEQA Guidelines references the California Agricultural LESA Model (1997) prepared by the California Department of Conservation (DOC), as an optional methodology that may be used to assess the relative value of agriculture and farmland. In the past, the LESA model has been applied to various agricultural properties throughout the County of San Diego to assess agricultural importance in association with proposed discretionary land use permits. After several years of practical experience with application of the LESA model in San Diego County, the inadequacy of the model in capturing the unique and varied character of San Diego agriculture has become apparent. An alternative approach, referred to as the Local Agricultural Resource Assessment (LARA) model has been developed to assess the relative value of agricultural resources in San Diego County. Specific documentation of the LESA model can be found in the Guidelines for Determining Significance for Agricultural Resources at <http://www.sdcounty.ca.gov/dplu/Resource/3~procguid/3~procguid.html#agr>.

The LARA model takes into account the following factors in determining the importance of an agricultural resource:

### **Required Factors:**

- Water
- Climate
- Soil Quality

### **Complementary Factors:**

- Surrounding Land Uses
- Land Use Consistency
- Topography

The following subsections detail the rating assigned to the project site for each of the above factors.

## 2.1 Water

The water rating is primarily based on the site's County Water Authority (CWA) service status, however if the project does not already have imported water service, the underlying groundwater aquifer type and the presence of a groundwater well is also considered (Table 1).

The property is located inside the CWA. There is a water meter on site and the property is served by the Rainbow Municipal Water District. The project site's water rating is High.

**Table 1. Water Rating**<sup>1</sup>

<b>County Water Authority (CWA) Service Status</b>	<b>Groundwater Aquifer Type and Well Presence</b>	<b>Rating</b>
Inside CWA service area with existing water infrastructure connections and a meter	Any groundwater aquifer type	High
Inside CWA service area with infrastructure connections to the site, but no meter has been installed	The site is located in an Alluvial or Sedimentary Aquifer <i>and</i> has an existing well	High
	The site is located in an Alluvial or Sedimentary Aquifer, but has no existing well	Moderate
	The site is located on Fractured Crystalline Rock and has an existing well	Moderate
	The site is located on Fractured Crystalline Rock, but has no existing well	Low
Outside CWA or inside CWA but infrastructure connections are not available at the site and no meter is installed	The site is located in an Alluvial or Sedimentary Aquifer <i>and</i> has an existing well	Moderate
	The site is located in an Alluvial or Sedimentary Aquifer, but has no existing well	Low
	The site is located on Fractured Crystalline Rock (with or without a well)	Low
	The site is located in a Desert Basin (with or without a well)	Low

<sup>1</sup> If more than one underlying groundwater aquifer type exists at a site, usually the aquifer type that could produce the most water should be used to obtain the water rating. If it would be more reasonable to apply the rating based on the aquifer that would produce less water, a clear justification and reason for doing so must be provided.

## 2.2 Climate

Sunset Zones are used as a standard measure of climate suitability due to the variability of microclimate conditions that the Sunset zones take into account. Recognizing that the Sunset Zones were not developed as a tool to determine the suitability for commercial agricultural production, their use is not intended to determine suitability for specific crops, rather they are a measure of overall climate suitability for the typical agricultural commodities produced in San Diego County. The project site is located within Sunset Zone 23, which has a rating of High.

Climate (Sunset Zone) Description	Rating
<b>Zone 23</b> represents thermal belts of the Coastal Area climate and is one of the most favorable for growing subtropical plants and most favorable for growing avocados. Zone 23 occurs in coastal incorporated cities and also occurs in the unincorporated communities of Fallbrook, Rainbow, Bonsall, San Dieguito, Lakeside, western portions of Crest and Valle De Oro, Spring Valley, Otay, and western portion of Jamul-Dulzura.	<b>High</b>

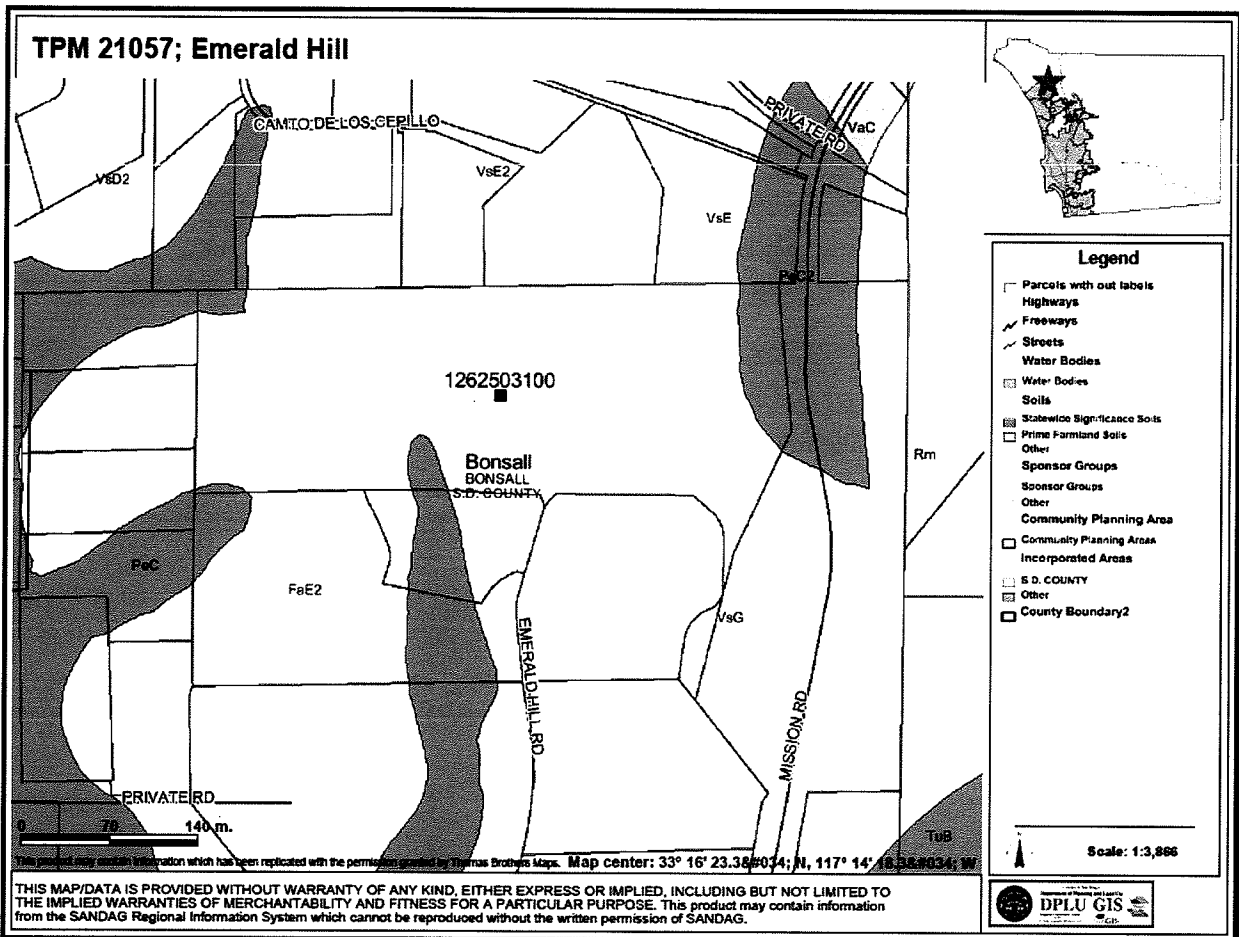
## 2.3 Soil Quality

The project's soil quality rating is based on the presence of Prime Farmland Soils or Soils of Statewide Significance that are available for agricultural use and that have been previously used for agriculture.

Almost 65 percent of the site (12.9 acres) has been used for agricultural purposes and almost 100 percent of the site (19.91 acres) is available for agricultural use. Approximately 1.47 acres of the site has soils that meet the soil quality criteria for the State FMMP Prime Farmland Category. 1.0 acre of the site has Placentia Sandy Loam, 2 to 9 percent slopes, eroded (PeC2). 0.47 acres of the site has Placentia Sandy Loam, 2 to 9 percent slopes (PeC)

Therefore the project's soil quality rating is 0.1, as detailed in Table 2, Soil Quality Matrix. The project receives a Low rating for soil quality based on this score.

Figure 1. Soil Types



**Table 2. Soil Quality Matrix**

	Column A	Column B	Column C	Column D	Column E	Column F	Column G
	Soil Type	Size of project site (acreage)	Unavailable for agricultural use	Available for agricultural use	Proportion of project site	Is soil candidate for prime farmland or farmland of statewide significance? (Yes = 1, No = 0)	Multiply Column E x Column F
Row 1	Vista coarse sandy loam, 30 to 65 percent slopes (VsG)	7.24	0	6	0.36	0	0
Row 2	Fallbrook sandy loam, 15 to 30 percent slopes, eroded (FaE2)	11.2	0	11.2	0.56	0	0
Row 3	Placentia sandy loam, 2 to 9 percent slopes, eroded (PeC2)	1.00	0	1.00	0.05	1	0.05
Row 4	Placentia sandy loam, 2 to 9 percent slopes (PeC)	0.47	0	0.47	0.03	1	0.03
	Total	19.91	Total	18.67			
	<b>Soil Quality Matrix Score</b>						<b>0.08</b>

**Table 3. Soil Quality Matrix Interpretation**

<b>Soil Quality Matrix Score</b>	<b>Soil Quality Rating</b>
The site has a Soil Quality Matrix score ranging from 0.66 to 1.0 and has a minimum of 10 acres of contiguous Prime Farmland or Statewide Importance Soils	High
The site has a Soil Quality Matrix score ranging from 0.33 to 0.66 or the site has a minimum of 10 acres of contiguous Prime Farmland or Statewide Importance Soils	Moderate
The site has a Soil Quality Matrix score less than 0.33 and does not have 10 acres or more of contiguous Prime Farmland or Statewide Importance Soils	Low

## 2.4 Surrounding Land Use

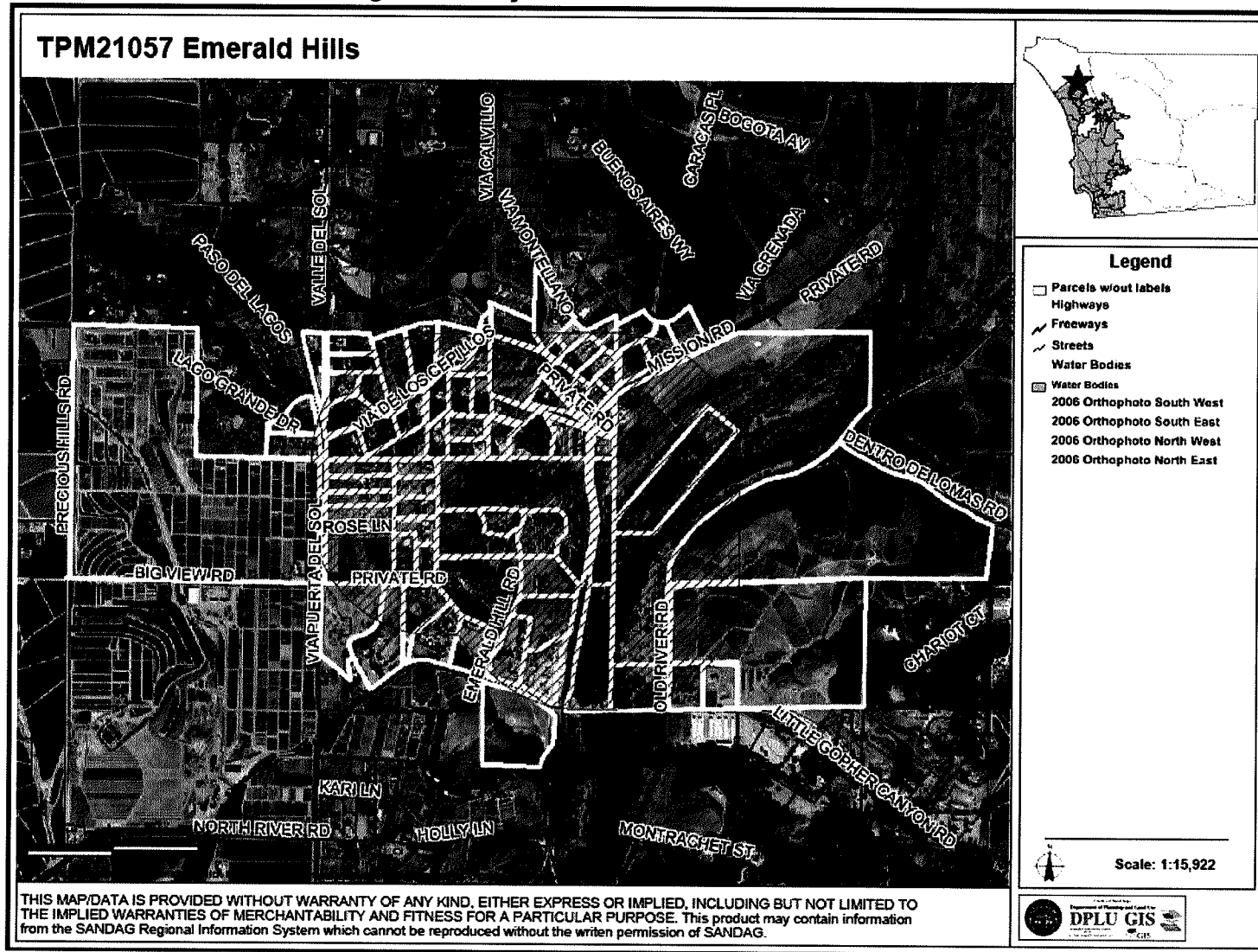
Surrounding land use is a factor in determining the importance of an agricultural resource because surrounding land uses that are compatible with agriculture make a site more attractive for agricultural use due to lower expectations of nuisance issues and other potential impacts from non-farm neighbors. This factor also accounts for the degree to which an area is primarily agricultural, assigning a higher rating to areas dominated by agricultural uses than an area dominated by higher density, urban development.

Figure 2 identifies the ¼ mile area surrounding the project site that defines the project's Zone of Influence (ZOI). Based on a review of the land uses within the ZOI, there are no incompatible land uses in the surrounding area. The surrounding area contains agriculture, estate style residential developments, and riparian habitat. Small commercial lots are located adjacent to Mission Road which runs on a north to south orientation through the ZOI. Based on the review of these land uses, at least 50% of the ZOI is compatible with agricultural use and the site receives a High rating for surrounding land use.

**Table 4. Surrounding Land Use Rating**

<b>Percentage of Land within ZOI that is Compatible with Agriculture</b>	<b>Surrounding Land Use Rating</b>
50% or greater	High
Greater than 25% but less than 50%	Moderate
25% or less	Low

Figure 2. Project Zone of Influence





## 2.5 Land Use Consistency

The median parcel size associated with the project site compared to the median parcel size of parcels located within the ZOI is a complementary factor used in the LARA model. There is one existing parcel in the project area and it is 19.91 acres in size, therefore the median parcel size of the current parcel is 19.91 acres. The median size of parcels in the proposed project is 3.07 acres. Parcels in the ZOI range between 0.57 acres to 120 acres. The median parcel size in the ZOI is 2.6. The median parcel size in the ZOI is smaller than the median parcel size in the project by 4.07 acres. Therefore, since the project's median parcel size is larger than the median parcel size within the project's ZOI by up to ten acres, the project receives a Moderate land use consistency rating.

**Table 5. Land Use Consistency Rating**

<b>Project's median parcel size compared to ZOI median parcel size</b>	<b>Land Use Consistency Rating</b>
The project's median parcel size is smaller than the median parcel size within the project's ZOI	High
The project's median parcel size is up to ten acres larger than the median parcel size within the project's ZOI	Moderate
The project's median parcel size is larger than the median parcel size within the project's ZOI by ten acres or more	Low

## 2.6 Slope

The Slope Rating for the site is based on the average slope for the area of the site that is available for agricultural use, as identified the Soil Quality Rating Matrix. Approximately 4.6 acres are in the 0-15% slope range; 9.6 acres are in the 15-25% slope range; and 13.8 acres are above 25% slope. The remainder of the site, 4.0 acres, is located in the 50% and greater range. Therefore, the average slope for the site falls in the 25% slope and higher category, resulting in a Low rating for slope.

**Table 6. Slope Rating**

<b>Average Slope</b>	<b>Topography Rating</b>
Less than 15% slope	High
15% up to 25% slope	Moderate
25% slope and higher	Low

### 3.0 LARA MODEL RESULTS

The ratings for each LARA model factor for the project site are as follows:

Required Factors

Water = High

Climate = High

Soil Quality = Low

Complimentary Factors

Surrounding land use = High

Land use consistency rating = Moderate

Slope = Low

**Table 7. Interpretation of LARA Model Results**

LARA Model Results			LARA Model Interpretation
Possible Scenarios	Required Factors	Complementary Factors	
Scenario 1	All three factors rated high	At least one factor rated high or moderate	The site is an important agricultural resource
Scenario 2	Two factors rated high, one factor rated moderate	At least two factors rated high or moderate	
Scenario 3	One factor rated high, two factors rated moderate	At least two factors rated high	
Scenario 4	All factors rated moderate	All factors rated high	
Scenario 5	At least one factor rated low importance	N/A	The site is <i>not</i> an important agricultural resource
Scenario 6	All other model results		

Based on the site conditions, the project's LARA model scoring falls under Scenario 5, indicating that the site is not an important agricultural resource.